

Program for - Equine Performance Testing Center



Prepared by:

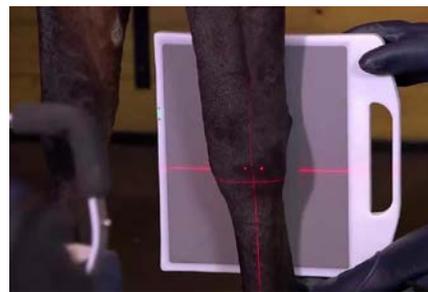


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May 28, 2014

Introduction

Approximately fifty percent of the roughly 2,500 equine services provided annually by the Veterinary Health Center (VHC) at Kansas State University involve performance-related disorders. A primary purpose of horse ownership is to maintain athletic activity, because when horses are unable to perform under saddle their utility is extremely limited. For this reason equine lameness examinations are an essential component of the maintenance and success of performance and ranch-type horses in Kansas. Patient examination and student teaching for accurate lameness detection are fundamental components required to meet the core mission of the equine section. For these reasons, it is paramount that our services meet the expectations of our clients, provide an optimal teaching environment and make available the standard of care for our profession.



Current Conditions & Space Summaries

Our current equine performance testing facilities substantially limit our ability to consistently examine horses during motion and gait analysis in hand and under saddle. The CVM complex was designed and built approximately forty years ago; since that time many changes have taken place in the equine world. Among those changes are the expectations for equine performance examination. Although forty years ago it was a reasonable scenario to schedule equine lameness examinations for acceptable seasonal weather conditions, this is no longer the case. It is commonplace for equine facilities to maintain an indoor arena which allows for equine activities 12 months of the year. In accordance with routine equine activities, veterinary services need to provide contemporary services that enable horses to be active throughout the year.

We generally perform lameness examinations indoors on a paved corridor or outdoors in our parking lot. Working in the parking lot is suboptimal from a safety perspective. During high traffic periods it is possible that automobile accidents with client animals could occur. Even though we have an asphalt area for longeing purposes, we do not have an enclosed facility for observation of horses while being ridden. If weather conditions are unfavorable (rain, sleet, snow, strong winds) we are required to examine patients on the paved corridor exclusively, which precludes our ability to observe horses other than in a straight line. Longeing or riding is not possible on the paved corridor which measures 20 feet in width. It should be noted that the absolute minimum dimensions for safely working a horse in a circle for lameness examination are approximately 30 feet. We have, therefore, proposed that an indoor enclosure be built to allow for a safe, consistent environment to observe horses during gait analysis.



Figure 1: An equine patient at the VHC during a lameness examination in cold, wet weather in the parking lot. Note that all parking spaces are filled; the movement of any vehicle has an impact on the examination and movement of this equine patient.



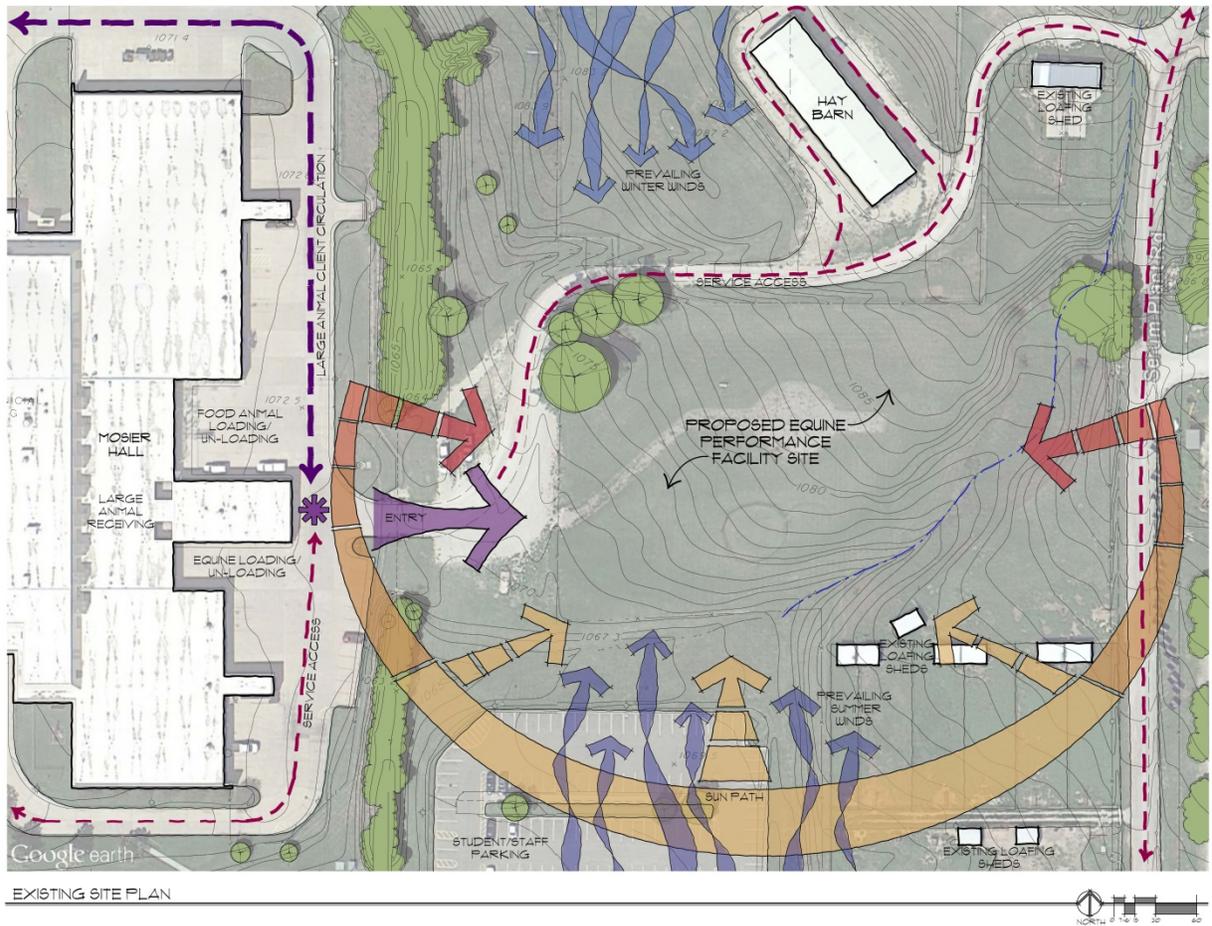
Figure 2: An equine patient at KSU during a winter time lameness exam, the daily temperature is below freezing and the examination is taking place in snowy conditions. There is no option for observation under saddle. The only soft footing area for examination is in snow which is slippery and dangerous for patient and rider.

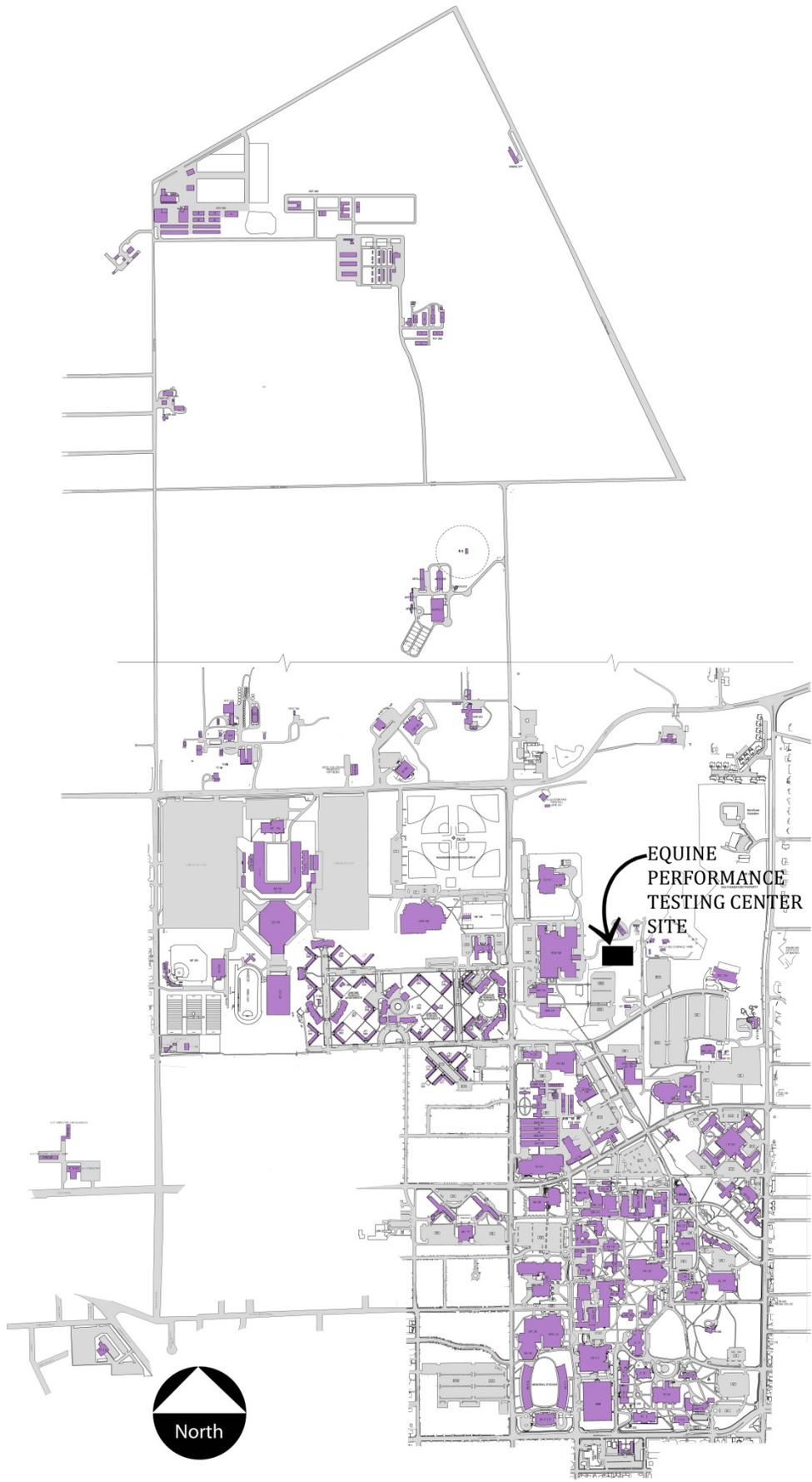


Figure 3: An equine patient that is attempting to be lunged on the paved corridor. The patient could not be examined outdoors, yet there is insufficient room to safely lunge the horse in a circle indoors. Standard length of rope for a horse for longeing is 35 feet; the entire width of this corridor is only 20 feet. The rope that is being used on this horse is 8 feet. The examination could not be performed.

Site Map

The proposed Equine Performance Testing Center will be located on Kansas State University's campus, within the Veterinary Health Center complex. The site is located to the East of Mosier Hall. Vehicular access to the site is provided from Denison Avenue through the existing Veterinary Medicine Large Animal Circulation / Service Road located at the North and East of Mosier Hall. Additional service access is provided using Serum Plant Road.





EQUINE
PERFORMANCE
TESTING CENTER
SITE



Project Description

It is our aim to build the Equine Performance Testing Center (EPTC) at Kansas State University which will provide safe, year round access to consistent footing and shelter from weather for horse owners, equine patients and veterinary students.

The proposed EPTC will contain a soft footing riding arena with approximate dimensions of 70' x 140'. In addition to a riding arena the EPTC will contain an area of asphalt footing to include a 50' diameter circular area for longeing purposes as well as a 15' x 140' runway for comprehensive lameness examination. The purpose for the separate areas is to provide an area with soft footing for general evaluation and under saddle assessment, whereas the firm footing surface will provide an area for examination that will accentuate subtle lameness that may not be evident in the soft footing areas. Collectively, the soft footing arena and asphalt areas will allow for a comprehensive examination that will involve both in hand and under saddle examinations. The indoor facility will enable the equine clinicians to examine patients and teach veterinary students 12 months of the year in a safe and effective environment.

Four holding stalls will be included for outpatient purposes. An area for farrier services is a core need to horses that come to the EPTC for examination and diagnostic testing. An essential component of complete equine lameness examination involves radiographic capabilities. Therefore a radiographic imaging area has also been included in the design of the facility. In an effort to complete the mission of this land grant institution, the facility will include a conference room which will provide an area for client services, student education and outreach activities involving the local and regional Kansas community.

Facility Space Program Summary -

	<u>Square Feet</u>
<u>1.1 Arena / Performance Assessment Areas</u>	16,445
<u>1.2 Horse / Working / Client Areas - Conditioned</u>	3,265
<u>1.3 Horse / Working / Client Areas - Not Conditioned</u>	4,186
<u>1.4 Support Areas</u>	1,485
TOTAL GROSS BUILDING SQUARE FOOTAGE	25,381



Kansas State University
**Equine Performance
 Testing Center**
 Space Program



ROOM / FUNCTIONAL AREA	PROPOSED SPACE ALLOCATION			PRELIMINARY
	EST. N.S.F.	QTY.	TOTAL N.S.F.	DESIGN NOTES / COMMENTS
1.1 Arena / Performance Assessment Areas				
a. Arena • 70' x 140'	9,800	1	9,800	<ul style="list-style-type: none"> • Soft Surface Footing • High volume low speed overhead fans • Radiant heat overhead • Adjacent to Round Pen & Trot-up/Runway
b. Longeing Area • 50' Diameter Longeing Area	3,322	1	3,390	<ul style="list-style-type: none"> • Hard Surface Footing=Asphalt • High volume low speed overhead fan • Radiant heat overhead • Adjacent to Arena & Trot-up/Runway
c. Trot-Up / Runway • 15' x 140'	2,000	1	2,100	<ul style="list-style-type: none"> • Hard Surface Footing=Asphalt • Radiant heat overhead • Adjacent to Round Pen & Trot-up/Runway
d. Maintenance Equipment • 28' x 18'	504	1	504	<ul style="list-style-type: none"> • Storage area for tractor with arena drag • Asphalt flooring
e. Storage • 22' x 18'	408	1	408	<ul style="list-style-type: none"> • Storage area for arena panels, etc. • Asphalt flooring
Facility Net Square Feet (nsf):			16,202	
Net-to-Gross Conversion Factor:			1.02	
Facility Gross Square Feet (gsf):			16,445	



Kansas State University
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ROOM / FUNCTIONAL AREA	PROPOSED SPACE ALLOCATION			PRELIMINARY
	EST. N.S.F.	QTY.	TOTAL N.S.F.	DESIGN NOTES / COMMENTS
1.2 Horse / Working / Client Areas - Conditioned Spaces				
a. Lobby • 18' x 20'	360	1	432	<ul style="list-style-type: none"> • Painted CMU Block wall • Stained concrete floor • Heat & air conditioned
b. Conference / Consultation • 20' x 48'	928	1	1,160	<ul style="list-style-type: none"> • Adjacent to the Warming Kitchen • Accommodate up to 60 people • Observation windows overlooking Arena • Projector with Screen • Tables and chairs • Windows to view Longeing Area / Arena • Painted CMU Block wall • Stained concrete floor • Heat & air conditioned
c. Warming Kitchen • 14' x 18'	240	1	240	<ul style="list-style-type: none"> • Adjacent to Conference/Consultation Room • Lower cabinets with counter with tile backsplash, sink, upper cabinets • Microwave • Refrigerator/Freezer • Dish washer • Pass thru window to Conf./Cons. Room • Range/Oven • Painted CMU Block wall • Stained concrete floor • Heat & air conditioned
d. Men's Rest Room • 10' x 18'	216	1	216	<ul style="list-style-type: none"> • ADA accessible • 2 - Lavatories • 2 - Toilets • 1 - Urinal • Water drinking fountain located outside of rest room • Painted CMU Block wall • Stained concrete floor • Heat & air conditioned



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ROOM / FUNCTIONAL AREA	PROPOSED SPACE ALLOCATION			PRELIMINARY
	EST. N.S.F.	QTY.	TOTAL N.S.F.	DESIGN NOTES / COMMENTS
1.2 Horse / Working / Client Areas - Conditioned Spaces Continued				
e. Women's Rest Room • 10' x 18'	216	1	216	<ul style="list-style-type: none"> • ADA accessible • 2 - Lavatories • 3 - Toilets • Water drinking fountain located outside of rest room • Painted CMU Block wall • Stained concrete floor • Heat & air conditioned
f. Janitor's Closet / Storage • 9' x 20'	168	1	168	<ul style="list-style-type: none"> • Adjacent to Conference/Consultation Room • Floor sink • Storage shelves • Painted CMU Block wall • Stained concrete floor
g. Mechanical Room • 10' x 14'	131	1	131	<ul style="list-style-type: none"> • Painted CMU Block wall • Stained concrete floor
Facility Net Square Feet (nsf):			2,915	
Net-to-Gross Conversion Factor:			1.12	
Facility Gross Square Feet (gsf):			3,265	



Kansas State University
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ROOM / FUNCTIONAL AREA	PROPOSED SPACE ALLOCATION			PRELIMINARY
	EST. N.S.F.	QTY.	TOTAL N.S.F.	DESIGN NOTES / COMMENTS
1.3 Horse / Working / Client Areas - Not Conditioned Spaces				
a. Imaging Room • 15' x 24'	352	1	352	<ul style="list-style-type: none"> • For taking Radiographs, etc. • Stocks with adjustable sides • Painted CMU Block wall • Non-slip, rubber flooring • Radiant heat overhead
b. Open Exam Area • 15' x 15'	220	1	220	<ul style="list-style-type: none"> • Stainless cabinets/counter with sink • Retractable hose reel; hot/cold water • Painted CMU Block wall • Non-slip, rubber flooring with drains • Radiant heat overhead
c. Equipment Room • 10' x 15'	137	1	137	<ul style="list-style-type: none"> • Lockable, to store equipment in as needed • Workstation with Computer • Storage for longe lines, whips, boots, halters, etc. • Storage for buckets, picking forks, brooms, shovels, etc. • Storage for a few bales of hay • Painted CMU Block wall • Stained concrete floor
d. Holding Stalls • 12' x 12'	144	4	576	<ul style="list-style-type: none"> • Painted CMU Block with full-view mesh 4'-0" sliding stall door • Painted CMU Block stall partition • Recessed water bucket hanger • Low hay mangers • Non-slip, rubber flooring
e. Wash / Groom Area • 12' x 12'	144	1	144	<ul style="list-style-type: none"> • Cross ties • Retractable hose reel; hot/cold water • Painted CMU Block wall • Non-slip, rubber flooring with drains
f. Aisle / Circulation • 12' Wide			1,240	<ul style="list-style-type: none"> • Non-slip, rubber flooring • Area drains



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ROOM / FUNCTIONAL AREA	PROPOSED SPACE ALLOCATION			PRELIMINARY
	EST. N.S.F.	QTY.	TOTAL N.S.F.	DESIGN NOTES / COMMENTS
1.3 Horse / Working / Client Areas - Not Conditioned Spaces Continued...				
g. Farrier Area • 16' x 17' • Covered Visiting Farrier Parking Area: 15' x 30'	275	1	275	<ul style="list-style-type: none"> • Cross ties • Recessed lighting at 30" A.F.F. • Painted CMU Block wall • Non-slip, rubber flooring • Exterior access for Farrier's Truck • Radiant heat overhead
• Covered Visiting Farrier Parking Area: 15' x 30'	450	1	450	
h. Future Resident Farrier Area • 16' x 17'	275	1	275	<ul style="list-style-type: none"> • To be finished in future phase
i. Future Resident Farrier Tools / Supplies • 15' x 15'	225	1	225	<ul style="list-style-type: none"> • To be finished in future phase
Facility Net Square Feet (nsf):			3,894	
Net-to-Gross Conversion Factor:			1.075	
Facility Gross Square Feet (gsf):			4,186	



Kansas State University
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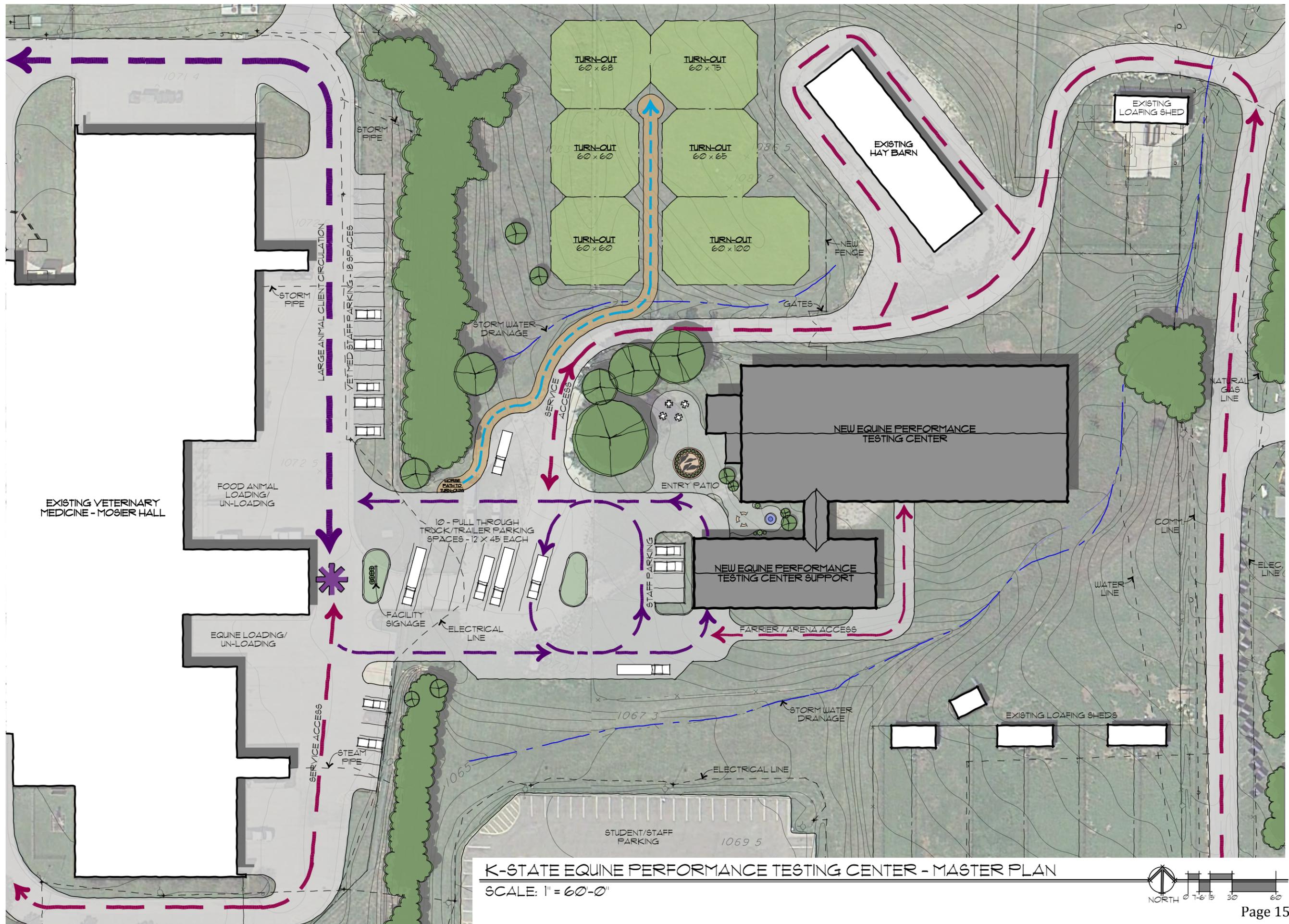
ROOM / FUNCTIONAL AREA	PROPOSED SPACE ALLOCATION			PRELIMINARY
	EST. N.S.F.	QTY.	TOTAL N.S.F.	DESIGN NOTES / COMMENTS
1.4 Support Areas				
a. Covered Loading / Un-loading • 25' x 45'	1,148	1	1,125	
b. Covered Connector • 14' x 25'	368	1	360	
Facility Net Square Feet (nsf):			1,485	
Net-to-Gross Conversion Factor:			1.00	
Facility Gross Square Feet (gsf):			1,485	



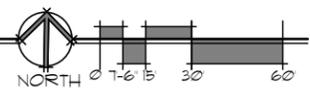
K-State Equine Performance Testing Center

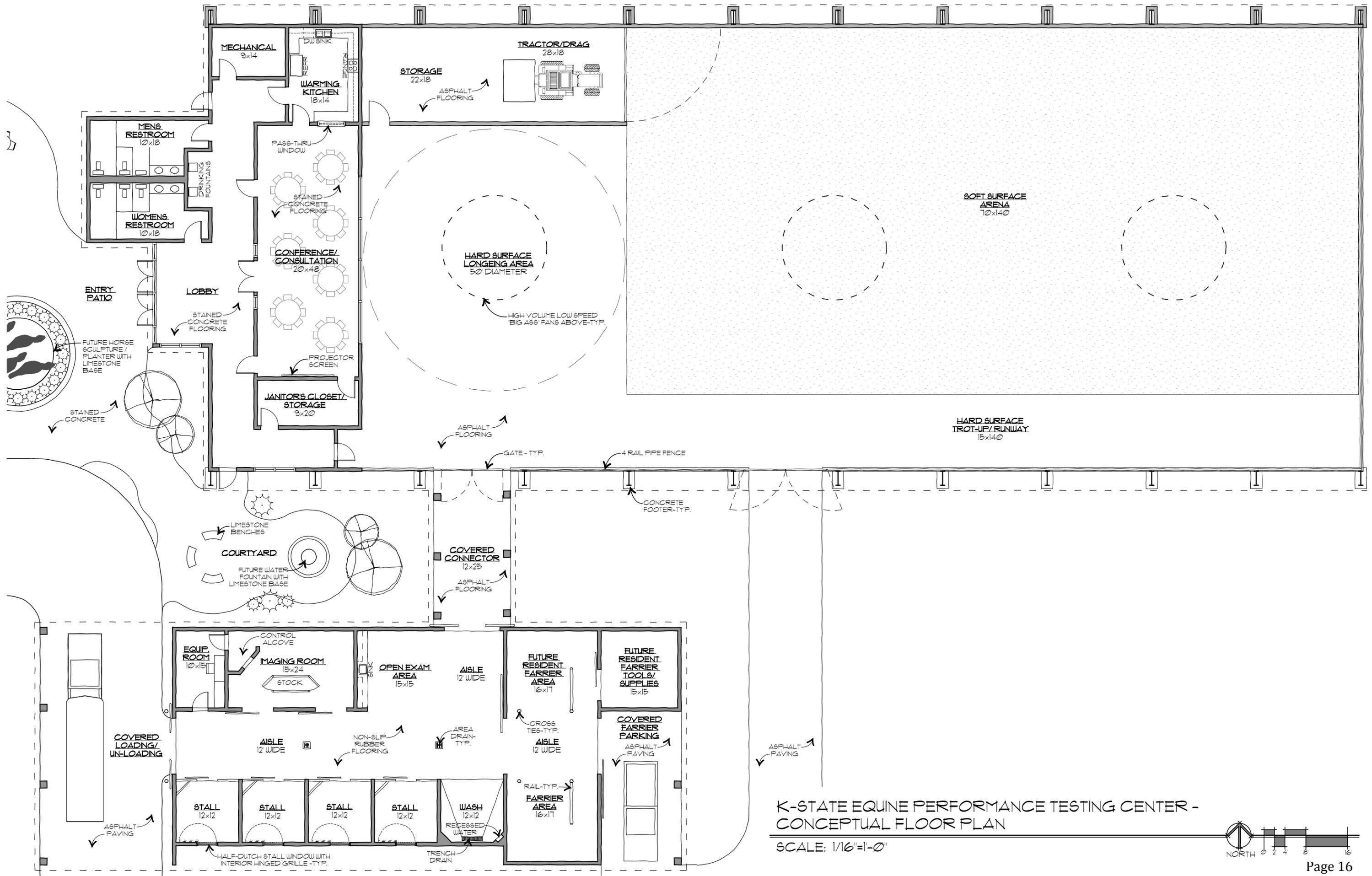
Concept Rendering - May 16, 2014

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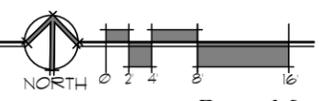


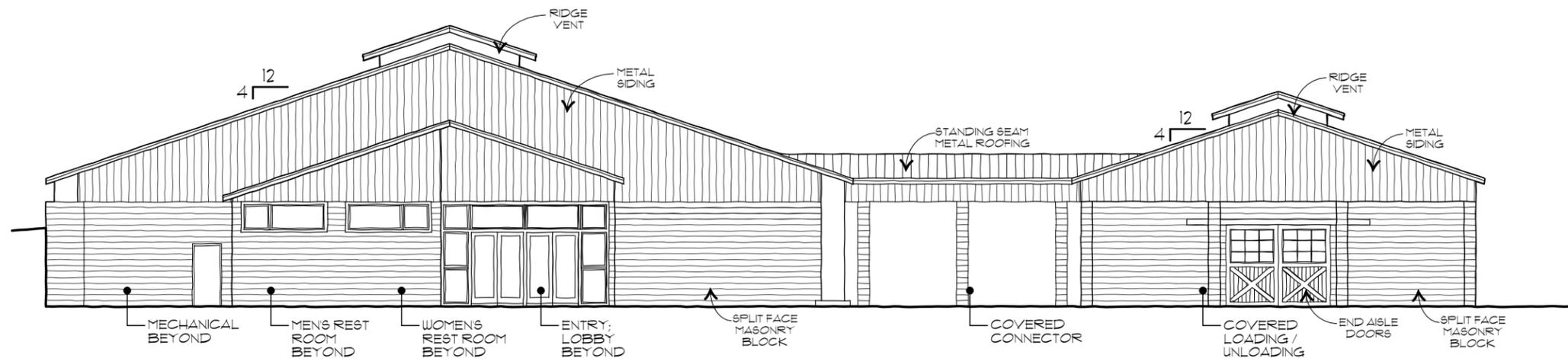
K-STATE EQUINE PERFORMANCE TESTING CENTER - MASTER PLAN
 SCALE: 1" = 60'-0"



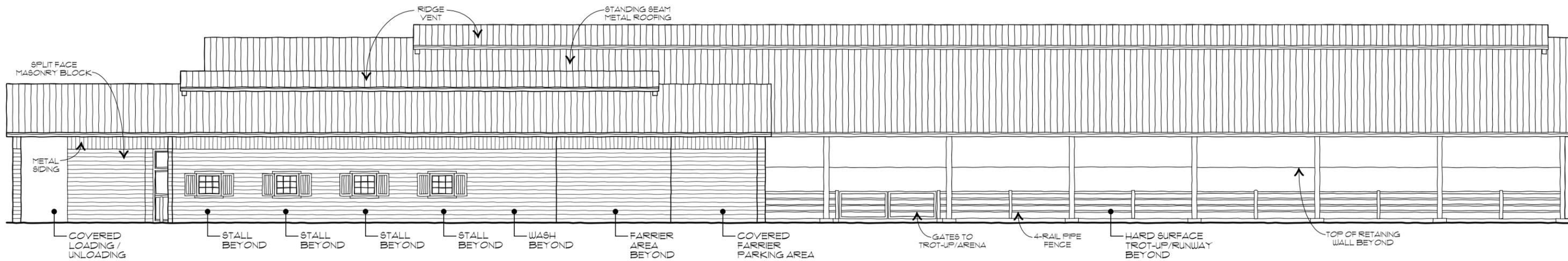
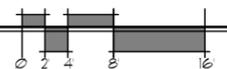


K-STATE EQUINE PERFORMANCE TESTING CENTER -
 CONCEPTUAL FLOOR PLAN
 SCALE: 1/16"=1'-0"

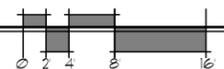




B K-STATE EQUINE PERFORMANCE TESTING CENTER - CONCEPTUAL WEST ELEVATION
 SCALE: 1/16"=1'-0"



A K-STATE EQUINE PERFORMANCE TESTING CENTER - CONCEPTUAL SOUTH ELEVATION
 SCALE: 1/16"=1'-0"



Date: May 23, 2014

GH2 Project #: 20130210

Project: K-State Equine Performance Testing Center

Item	Q	Quantity	Unit	Unit Cost	Cost
FACILITY SPACE PROGRAM SUMMARY					
1.1 ARENA/ PERFORMANCE ASSESSMENT AREAS	1	16,445	SF	\$ 44.00	\$ 723,580.00
1.2 HORSE/ WORKING/ CLIENT AREAS - CONDITIONED	1	3,265	SF	\$ 127.00	\$ 414,655.00
1.3 HORSE/ WORKING/ CLIENT AREAS - NOT CONDITIONED	1	4,186	SF	\$ 137.26	\$ 574,570.36
1.4 SUPPORT AREAS	1	1,485	SF	\$ 30.00	\$ 44,550.00
Subtotal					\$ 1,757,355.36
SITWORK					
1. SITE CLEARING/ DEMOLITION		2.9	ACR	\$ 2,500.00	\$ 7,250.00
2. EARTHWORK, ALLOWANCE		14,000	SY	\$ 2.50	\$ 35,000.00
3. DRIVES AND PARKING, ASPHALT		3,550	SY	\$ 50.00	\$ 177,500.00
4. CONCRETE CURB		385	LF	\$ 25.00	\$ 9,625.00
5. DECORATIVE CONCRETE PATIO		3,650	SF	\$ 10.00	\$ 36,500.00
6. HORSE PATH TO TURN-OUTS, AGG.		3,525	SY	\$ 10.75	\$ 37,893.75
7. TURN-OUT FENCE & GATES		1,300	LF	\$ 30.00	\$ 39,000.00
8. SIGNAGE, ALLOWANCE		1	LS	\$ 15,000.00	\$ 15,000.00
9. SEEDING/ HYDROMULCH		12,500	SY	\$ 0.95	\$ 11,875.00
10. SITE UTILITY, ALLOWANCE		1	LS	\$ 75,000.00	\$ 75,000.00
Subtotal					\$ 444,643.75
SUBTOTAL					\$ 2,201,999.11
DESIGN CONTINGENCY				5%	\$ 110,099.96
CONSTRUCTION CONTINGENCY				5%	\$ 115,604.95
TOTAL, INCLUDING CONTINGENCY					\$ 2,427,704.02
PROFESSIONAL DESIGN FEES					
KSU PLANNING FEE, \$6,920 + 0.4% OVER \$1,000,000		\$ 6,920.00		0.4%	\$ 16,630.82
OFPM FEE				1.65%	\$ 40,057.12
TOTAL, INCLUDING DESIGN, KSU & OFPM FEES					\$ 2,799,993.47

General Notes:

- * Preliminary concept estimate based on cost precedent using 2014 CostLink data and historical records.
- * Hazardous materials remediation not included.
- * Not Included: landscape, irrigation, art, water feature, interior or site furnishings.
- * Contact GH2 for cost escalation factors.
- * Cost allowances are included for probable work that cannot be defined at this time.

This cost estimate of the Cost of Work represents the Architect's best judgment as a design professional familiar with the construction industry using techniques appropriate to the phase of the design documents and the Architect's scope of services. It is recognized that the Owner or the Architect has no control over the cost of labor, materials or equipment, over the Contractor's methods of determining bid prices, or over competitive bidding, market or negotiating conditions; accordingly, it is agreed that the Architect cannot and does not warrant or represent that the bids or the Cost of Work will not vary from this estimate or the Owner's budget.

Funding

The Equine Performance Testing Center has been a primary fund raising goal for the Veterinary Health Center equine section for the past decade. In that time we have raised approximately \$450K to be put toward the project. Fund raising is ongoing and these funds with the Veterinary Health Center revenue will be used to fund this project.

Maintenance

The funding for maintenance will be allocated from the Veterinary Health Center revenues. Using the KBOR-FY 2007 formula with the FY 2015 revisions, this building will require .25 FTE for salaries of \$9,238. The utility rate is calculated at \$62,958 (22,116 GSF (unconditioned space) @ \$2.33 plus 3,265 GSF (conditioned space) @ \$3.50) and other operating expenditures at \$5,637.

The total costs of maintenance and operations for this building are \$77,833.

PROJECT SCHEDULE

K-State Equine Performance Testing Center

